FACT SHEET FOR NPDES PERMIT NO. WA-005079-2

ROCKY REACH HYDROELECTRIC PROJECT PUBLICLY-OWNED TREATMENT WORKS

GENERAL INFORMATION	
Applicant	Public Utility District No. 1 of Chelan County
Facility Name and Address	Rocky Reach Hydroelectric Project Public-Owned Treatment Works Within Rocky Reach Dam Route 97A
Type of Treatment	Individual septic tanks connected to an extended aeration package plant with chlorination
Discharge Location	Columbia River Latitude: 47° 31' 50" N Longitude: 120° 17' 50" W.
Water Body ID Number	WA-CR-1040

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), which is administered by the U. S. Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington (State) on the basis of Chapter 90.48 RCW (Revised Code of Washington) which defines the Department of Ecology's (Department) authority and obligations in administering the wastewater discharge permit program.

The regulations adopted by the State include procedures for issuing permits (Chapter 173-220 Washington Administrative Code), technical criteria for discharges from municipal wastewater treatment facilities (Chapter 173-221 WAC) and water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the State is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit.

This permit contains the technology-based effluent limitations as given in the Code of Federal Regulations (CFR) 40 CFR Part 133 (Federal) and in Chapter 173-221 WAC (State). A preliminary assessment of the discharge's potential for exceedance of the water quality standards for chlorine and ammonia has been made. Where there is a lack of adequate data indicating the discharger's potential for exceedance of the water quality criteria, this permit does not include water quality-based numeric effluent limitations. Based on the Department's preliminary evaluation, the permit may include monitoring requirements and/or specified measures to control discharges of these toxic pollutants.

One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review (see Appendix A--Public Involvement of the fact sheet for more detail on the Public Notice procedures).
This fact sheet has been reviewed by the Permittee and errors in fact have been corrected. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments (Appendix D) will become part of the file on this permit and parties submitting comments will receive a copy of the Department's response. This fact sheet will not be revised. Changes to the permit will be addressed in Appendix D--Response to Comments.

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

The Rocky Reach Dam Wastewater Treatment Plant has been classified as a Class I facility (**Appendix C**) due to the component parts and complexity of the septic tank and package plant operations. The treatment plant operator of this system must be at least a Class I operator certified by the State of Washington. The facility is typically staffed by one Foreman Mechanic and a Facility Mechanic (both Class I certified). Normal hours are 7:00 a.m. to 5:00 p.m., Monday through Friday. This level of attention is normally sufficient for small extended aeration package plants, provided routine process control and adequate preventative maintenance are being performed.

A NPDES permit was first issued in 1975, and was most recently renewed in 1994. The most recent permit application estimated that the normal population equivalent served by the facility as 26 employees and 183 visitors.

Collection System

The facility's collection system is composed of less than one mile of collection piping which gravity flows to four (4) septic tanks, each treating different influent flows from separate areas of the dam. Partially-treated wastewater from septic tanks are delivered to the 4,000 gallon package plant through a pumping station.

Treatment Processes

The facility is a Septic Tank Effluent Pumped (STEP) system extended aeration package plant design which provides secondary treatment for the Rocky Reach Dam. Effluent is continuously discharged to the Columbia River (while sludge is normally collected for discharge back into the septic tanks).

Influent enters the septic tanks where primary digestion and solids separation occur. Septic tank effluent discharges to a single extended-aeration package plant via a 6-inch pipe. At the headworks, a 3/4-inch-spaced barscreen is used to remove oversized inorganic particles before entering a mixing chamber where representative influent samples are collected. The flow is then dumped into the 4,000-gallon aeration tank where aerobic digestion (decomposition) occurs creating what is termed mixed liquor. Mixed liquor effluent then flows into a 670-gallon secondary clarifier, where suspended solids are allowed to settle out. Clarifier supernatant (final effluent) flows through the clarifier weirs to enter a chlorine contact tank, where disinfection occurs. Settled clarifier sludge is either returned to the aeration tank as return activated sludge

(RAS), or discharged back into the septic tanks (WAS). The septic tanks are pumped out by a licensed septic tank disposal company, as necessary.

Residual Solids

A Residual Solids Management Plan (RSMP) will not be required by this permit, because much of the sludge is wasted back into treatment process, and sludge that is removed from the system is disposed of by a licensed septage hauler.

Discharge

The Rocky Reach Dam Wastewater Treatment Facility discharges effluent via a 4-inch diameter submerged outfall pipe with no attached diffuser. The outfall is located below and approximately two (2) feet offshore and submerged approximately five (5) feet beneath the surface of the Columbia River at Lat: 47°31'50", Long: 120°17'50" in the SW¼ of Section 35, T.24 N., R.22 E.W.M. in Chelan County.

According to the information provided by the applicant, there are no industrial contributors to the facility's sewer collection system.

Description of the Receiving Water

The facility discharges to the Columbia River, which is designated as a Class A receiving water in the vicinity of the outfall. According to the Department's 303(d) list, this segment of the receiving water is presently water quality-impaired for total dissolved gas and water column bioassay. Characteristic uses of this waterbody include the following:

> Water supply (domestic, industrial, agricultural); stock watering; fish migration; fish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation.

Water quality of this class shall meet or exceed the requirements for all or substantially all uses.

PERMIT STATUS

The previous permit for this facility was issued on November 15, 1994. The previous permit placed effluent limitations on 5-day Biochemical Oxygen Demand (BOD_5), Total Suspended Solids (TSS), pH, Fecal Coliform bacteria, and Total Residual Chlorine.

An application for permit renewal was received by the Department on May 27, 1999 and accepted by the Department on June 1, 1999.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

A compliance inspection without sampling was conducted on February 3, 1999. The facility was found to be well maintained and records were in order.

During the history of the previous permit the Permittee has generally remained in compliance, with few exceedances, based on Discharge Monitoring Reports (DMRs) submitted to the Department and inspections conducted by the Department. Between May 1996 and April 1999, TSS effluent limits were exceeded during April 1999, and the daily maximum Residual Chlorine limit was exceeded in July and September 1998.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the NPDES application and in discharge monitoring reports. The effluent is characterized as follows:

Table 1: Wastewater Characterization

	Influent	Effluent		
Parameter	Annual average	Annual average	Lowest monthly average	Highest monthly average
Flow (MGD)	0.0015	0.0015	0.001	0.002
BOD_5 (mg/L)	105	9	<5	17
TSS (mg/L)	43	13	4	25
Fecal Coliform (colonies per 100 mL)	NA	NA	NA	5.3
Total Residual Chlorine (mg/L)	NA	0.6	0.5	0.8
pH range (Standard Units)	NA	low pH = 6.8 high pH = 7.0		

NA-Not applicable

PROPOSED PERMIT LIMITATIONS AND CONDITIONS

Federal and State regulations require that effluent limitations set forth in a NPDES permit must be either technology- or water quality-based. Technology-based limitations for municipal discharges are set by regulation (40 CFR 133, and Chapters 173-220 and 173-221 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC) or Sediment Quality Standards (Chapter 173-204 WAC). The most stringent of these types of limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Municipal wastewater treatment plants are a category of discharger for which technology-based effluent limits have been promulgated by Federal and State regulations. These effluent limitations are given in the 40 CFR Part 133 (Federal) and in Chapter 173-221 WAC (State). These regulations are performance standards that constitute "all known available and reasonable methods of prevention, control, and treatment" (AKART) for municipal wastewater.

The following technology-based limitations are taken from Chapter 173-221 WAC (Discharge Standards and Effluent Limitations for Domestic Wastewater Facilities):

pH	shall be within the range of 6.0 to 9.0 standard units.
Fecal Coliform Bacteria	Monthly Geometric Mean = 200 colonies/100 ml Weekly Geometric Mean = 400 colonies/100 ml
BOD_5 and TSS	Average Monthly Limits are the most stringent of the following: = 30 mg/L, or a maximum of fifteen percent (15%) of the average influent concentration, except for STEP systems[1]. Average Weekly Limits = 45 mg/L
[1]Because the Permittee's wastewater treatment facility is a variety of STEP system, this permit will contain language which does not directly require the facility to meet the standard 85% removal efficiency requirement. This permit will instead indicate that as long as the permit effluent limits are met, the Permittee will be presumed to be in compliance with the 85% removal efficiency requirement.	

The following technology-based limitations are based on WAC 173-220-130(3)(b) and 173-221-030(11)(b). Effluent mass loading limits (lbs/day) were calculated as follows:

Monthly Average Effluent Mass Loading Limit = **[**Average design flow (0.004 mgd) **X** Effluent concentration limit (30 mg/L) **X** Conversion factor (8.34)**]** = 1.0 lbs/day

Weekly Average Effluent Mass Loading Limit = **[**(1.5) **X** Monthly average effluent mass loading (1.0 lbs/day)**]** = 1.5 lbs/day.

The following technology-based limitations are based on AKART, which was found at various wastewater treatment facilities located in hydroelectric projects on the Columbia River:

Parameter	Daily Maximum	Monthly Average
Chlorine	2.0 mg/L	1.0 mg/L

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established Surface Water Quality Standards.

The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a State regulation designed to protect the beneficial uses of the surface waters of the State.
All effluent parameters regulated by this permit are limited by technology-based performance standards; therefore, water quality-based effluent limits are not applied to the Permittee's discharge.

CONSIDERATION OF SURFACE WATER QUALITY-BASED CRITERIA

Critical Conditions

Determination of the reasonable potential for exceedance of the surface water standards quality standards are made for the waterbody's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic water body uses.

Mixing Zones

All effluent limits established by this permit are technology-based and were achieved by the Permittee during the previous permit cycle; however, a mixing zone has been authorized by the Department so that the discharge will not be out of compliance at the end of pipe.

Chlorine Considerations

Due to the enormous amount of mixing and dilution which occurs in the receiving water, technology-based limits were found to be more protective of the environment than water quality-based performance standards; therefore, the discharge from this facility does not have a reasonable potential for exceedance of the water quality chlorine standards. The permit requires

that the Permittee shall not use chlorine concentrations in excess of that necessary to reliably achieve coliform limits in the permit.

Ammonia Considerations

Based on the Department's preliminary assessment of the effluent mixing and dilution in the receiving water, the discharge from this facility does not have a reasonable potential for exceedance of the ammonia criteria outside the allowable mixing zone in the receiving water. This permit does not contain effluent limits for ammonia; however, quarterly monitoring of effluent ammonia is required.

COMPARISON OF EFFLUENT LIMITS WITH THE PREVIOUS PERMIT

Parameter	Existing Permit Limits		Proposed Permit Limits	
	Monthly Average	Weekly Average	Monthly Average	Weekly Average
BOD	30 mg/L 1.0 lb/day	45 mg/L 1.5 lbs/day	30 mg/L 1.0 lb/day	45 mg/L 1.5 lbs/day
TSS	30 mg/L 1.0 lb/day	45 mg/L 1.5 lbs/day	30 mg/L 1.0 lb/day	45 mg/L 1.5 lbs/day
Fecal Coliform	200/100 mL	400/100 mL	200/100 mL	400/100 mL
pH	6 to 9 standard units		6 to 9 standard units	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Residual Chlorine	1.0 mg/L	2.0 mg/L	1.0 mg/L	2.0 mg/L

MONITORING AND REPORTING

Effluent monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved.

The monitoring and testing schedule is detailed in this permit under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring. The required monitoring frequency is consistent with agency guidance given in the current version of the Department's Permit Writer's Manual.

OTHER PERMIT CONDITIONS

PREVENTION OF FACILITY OVERLOADING

Overloading of the treatment plant is a violation of the terms and conditions of this permit. To prevent this from occurring, RCW 90.48.110 and WAC 173-220-150 require the Permittee to take the actions detailed in Special Condition S4. to plan expansions or modifications before existing capacity is reached, and to report and correct conditions that could result in new or increased discharges of pollutants. Special Condition S4. restricts the amount of flow.

DESIGN CRITERIA

In accordance with WAC 173-220-130(1)(a), effluent limitations shall not be less stringent than those based upon the design criteria for the facility, which are contained in approved engineering plans, reports, or approved revisions. Also, in accordance with WAC 173-220-150 (1)(g), flows or waste loadings shall not exceed approved design criteria.

The design criteria for this treatment facility are taken from the fact sheet associated with the previous permit and are as follows:

Table 2: Design Standards for the Rocky Reach POTW.

Parameter	Design Quantity
Monthly average flow (max month) (MGD)	0.004
BOD influent loading (lbs/day)	6.7
TSS influent loading (lbs/day)	6.7

OPERATION AND MAINTENANCE (O & M)

This permit contains Special Condition S5. as authorized under RCW 90.48.110, WAC 173-220-150, Chapter 173-230 WAC, and WAC 173-240-080. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

GENERAL CONDITIONS

General Conditions are based directly on State and Federal law and regulations and have been standardized for all individual NPDES permits issued by the Department.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards, Sediment Quality Standards, or Ground Water Standards, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended State or Federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. The Department proposes that this permit be issued for five (5) years.

REVIEW BY THE PERMITTEE

A proposed permit was reviewed by the Permittee for verification of facts. Only factual items were corrected in the draft permit and fact sheet.

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on July 30, and August 6, 1999 in the Wenatchee World to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department published a Public Notice of Draft (PNOD) on August 23, 1999 in the Wenatchee World to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and the reasons why the hearing is warranted.
The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (509) 575-2821, or by writing to the address listed above.

APPENDIX B--GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART--An acronym for "all known, available, and reasonable methods of prevention, control, and treatment" and includes best management practices as may be stipulated by the Department.

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation--The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The daily discharge is calculated as the average measurement of the pollutant over the day.

Average Weekly Discharge Limitation --The highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The daily discharge is calculated as the average measurement of the pollutant over the day.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the Federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Class 1 Inspection--A walk-through inspection of a facility that includes a visual inspection and some examination of facility records. It may also include a review of the facility's record of environmental compliance.

Class 2 Inspection--A walk-through inspection of a facility that includes the elements of a Class 1 Inspection plus sampling and testing of wastewaters. It may also include a review of the facility's record of environmental compliance.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Combined Sewer Overflow (CSO)--The event during which excess combined sewage flow caused by inflow is discharged from a combined sewer, rather than conveyed to the sewage treatment plant because either the capacity of the treatment plant or the combined sewer is exceeded.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Daily Maximum Discharge Limitation--The greatest allowable value for any calendar day.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the effluent fraction.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Infiltration and Inflow (I/I)--"Infiltration" means the addition of ground water into a collection system through joints, the sewer pipe material, cracks, and other defects. "Inflow" means the addition of rainfall-caused surface water drainage from roof drains, yard drains, basement drains, street catch basins, etc., into a collection system.

Interference--A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

1. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
2. Therefore is a cause of a violation of any requirement of the POTW's permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewer sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), sludge regulations appearing in 40 CFR 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in State regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

Pass through--A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Significant Industrial User (SIU)--

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs, or to the POTW in the case of delegated POTWs.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, wetlands, and all other surface waters and watercourses within the jurisdiction of the State of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit--A permit limit on the discharge concentration and/or mass of an effluent parameter which is based on the ability of a treatment method, or methods to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids are the particulate material in a wastewater or effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the discharge concentration and/or mass of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C -- WASTEWATER TREATMENT FACILITY CLASSIFICATION WORKSHEET

Purveyor : Public Utility District No. 1 of Chelan County
Address : PO Box 1231
Wenatchee, WA 98801

Facility Name : Rocky Reach Dam Wastewater Treatment Plant
Address : Route 97A
Wenatchee, WA 98801

County : Chelan Phone: (509) 663-8121

Ownership of Plant: [X] Public [ ] Private

Facility --- Class	I	II	III	IV
Range of Points	25 and less	26-50	51-70	71 and greater

ITEM	POINTS	POINTS ASSIGNED
Size		
Design Flow 1 point per 5 mgd - maximum 20 points		1
Population Equivalent (PE)	1 point per 5000 PE - maximum 20 points	1
Pretreatment Units		
Manually cleaned screens	1	1
Mechanically cleaned screens	2	0
Grit removal	3	0
Pre-aeration	1	0
Communitor, barminutors, grinders, etc.	1	0
Plant pumping	3	0
Separate industrial waste pretreatment	10	0
Primary Treatment Units		
Imhoff tank, spirogesters, clarigesters, etc.	3	3
Primary clarifiers	5	0
Primary clarifiers utilizing settling aid chemicals	9	0
Secondary Treatment Units		
Trickling filter (without recirculation)	5	0
Trickling filter (with recirculation) or 2-stage RBC unit	7	0
3-stage RBC unit	9	0
Activated sludge		
Mechanical aeration	8	0
Diffused or dispersed air (or an SBR)	10	10
Oxidation ditch	8	0
Pure oxygen	13	0
Stabilization ponds	5	0
Stabilization ponds with aeration	7	0
Secondary clarifiers (or an SBR)	5	5
Tertiary Treatment Units		
Polishing pond	2	0
Land disposal of effluent, or post-aeration	5	0
Chemical treatment for phosphorus removal	5	0
Activated carbon beds (with carbon regeneration)	10	0
Activated carbon beds (without carbon regeneration)	8	0
Sand or mixed-media filters	4	0
Other nutrient removal processes following secondary treatment	10	0
Disinfection	4	4
Sludge Treatment		
Anaerobic digesters	4	0
If heated, add	3	0
If mechanically or gas mixed, add	2	0
Aerobic digesters	6	0
Drying beds or evaporation lagoons	2	0
Thickener clarifier, or polymer addition	5	0
Vacuum filter, or centrifuge	7	0
Land application, or supernatant lagoons	5	0
Incinerator	10	0
Utilizing digester gas for other than heating purposes	3	0
TOTAL		25
CLASS		**I**

APPENDIX D--RESPONSE TO COMMENTS

No comments were received by the Department of Ecology.